BOSTON HARBOR FOR ALL

WATERFRONT VISITATION & EQUITY STUDY

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Executive Summary

How many people visit Boston's waterfront? For years, we didn't know. There is no single entrance to Boston Harbor. Instead, the waterfront is an engaging, wide-open public space that includes the **Boston Harborwalk**, neighborhood **waterfront parks**, the **Harbor Islands**, and a **broad waterfront**, that stretches into multiple neighborhoods. These spaces connect people to nature, one another, commerce, and Boston's maritime heritage.

But there are no ticket sales to tally. And after decades of efforts to connect people to the water, including a **$20 billion** dollars of public funds, we could not say who was — or was not — benefitting from one of Boston's largest natural and cultural assets. We needed more information to ensure that the Harbor is benefiting everyone.

METHODOLOGY

We looked for a way to meaningfully measure visitation and to understand whether decades of waterfront improvement had delivered on the promise of equitable public access. The options we have historically relied on, including visitor statistics collected by park staff as well as estimates from ferry operators and tourism agencies, fell short and offered little insight into fully understanding who the visitors are, where they're coming from, and who isn't benefiting from the Harbor's public open spaces.

A comprehensive **Visitation and Equity Study of Boston Harbor** was needed to take a holistic look at the factors influencing access and use, incorporating demographic data, accounts of lived experiences of residents and visitors, journal articles, survey data, and other sources. One approach stood out as being far more precise, using the abundant data generated by mobile phones, which is part of a larger collection of what is known as mobility data.

Analyzing mobility data became essential during the pandemic when public health officials were racing to monitor and prevent Covid infections. Data came from Apple, Google, and Meta, the company that owns Facebook. Today, mobility data can be collected from other sources such as rideshare programs and location tagging in social media apps.

As we considered utilizing mobility data, we were concerned about privacy, accuracy, and using the data for the public good. So in 2022, we took these issues into consideration when launching the Waterfront Visitation and Equity Study to analyze mobility data related to Boston Harbor. We worked with Tectonix, our project technology partner, to use their super-computing platform. Veraset, our data partner, provided 170 billion anonymized cell phone records for the state of Massachusetts that spanned four years, from 2019, a "normal," pre-pandemic year, through 2022. The result was a ground-breaking analysis of visitation data that protected the privacy of individuals while allowing us to gain insights into demographic information such as visitors' income, race, age, education, and hometowns.

For the first time, we could see who was visiting Boston's waterfront. To supplement this analysis, we hired MassINC Polling Group to conduct a sub-study for validation through on-the-ground, in-person surveys of visitors in five of Boston's waterfront parks:

- *Christopher Columbus Waterfront Park located downtown in the Wharf District*
- *Martin's Park in Fort Point Channel*
- *Piers Park in East Boston*
- *Pope John Paul II Park in Dorchester, and*
- *Castle Island in South Boston*

In 2023, polling teams conducted park visitor headcounts and more than 1,550 surveys between August 9th and September 1st, during hours spanning from 11 a.m. to 7 p.m., capturing data on daily use of the waterfront. When analyzed using the Pearson model, the MassINC data revealed a strong correlation with demographic findings from the mobility data. This alignment provided valuable information into waterfront usage patterns and informed a deeper analysis

of who is accessing these public spaces. To further enrich this work, we conducted over 50 hours of interviews with nearly a dozen waterfront stakeholders and visitors. These one-on-one conversations gave critical context to the mobility data, surfacing personal narratives, cultural connections, and firsthand accounts of barriers to access. Together, the qualitative and quantitative insights painted a more complete picture of visitation and equity on the waterfront, what's working, what's missing, and what must be done to close the gap of who is accessing these public spaces.

KEY LEARNINGS

The Waterfront Data Project produced some exciting insights. We can now say that the Boston Harborwalk receives over an average of **11 million** visits every year. But having tthis number is just a start. We now also know more about who comes to the waterfront. The analysis revealed year-on-year changes in visitation. Most strikingly, the Waterfront Data Project mapped waterfront usage through the pandemic (March 2020 – May 2021). And we can pinpoint how visitation varied in different waterfront locations. Among the things we learned:

- *The region's waterfront visitation is robust: A comprehensive analysis of four years of statewide mobility data (2019–2022) shows the broad waterfront from Salem to Hull receives more than 306 million annual visits, with the Boston Harborwalk drawing nearly 11 million, Boston's 28 waterfront parks attracting 2.4 million, and the Boston Harbor Islands National and State Park welcoming about 367,000 visits across its 34 islands and peninsulas*
- *from 2019 to 2021, the Broad Waterfront saw a 40% drop in visitors from COVID restrictions and changes in commuter patterns*
- *on the Harborwalk and the waterfront parks, the greatest increase in visitors was among Black and Latino visitors, which suggests that more people in these racial and ethnic groups saw the waterfront as a safe place to go during the Covid pandemic.*
- *the percentage of non-White visitors increased across all areas of the waterfront from 2019 through 2021, peaking at about 40% of total visits.*
- *while BIPOC visitation to waterfront public spaces has increased, representation still falls short of reflecting Boston's demographics. With white visitors making up more than 65% of all visits, closing this gap remains a critical equity challenge for the region's waterfront*
- *public waterfront visitors' average household income dropped from $95,000 in 2019 to $75,000 in 2021.*

- *visitor levels seesawed on Boston's Harbor Islands through the pandemic and reopening: increasing by 40% in 2020, then dropping in 2022 when numbers were 75% lower than they were in 2019 (pre-COVID)*
- *in 2022, there were sharp increases in older visitors (age 65 and up), especially on the Boston Harbor Islands*

CONVERTING DATA INTO ACTION

We have woven these insights into Boston Harbor Now's new five-year **Strategic Plan**[1], setting the foundation for meaningful and lasting change. This plan is not just a roadmap, it's Boston Harbor Now's commitment to turning data-driven insights into action that creates a more inclusive and welcoming Boston Harbor.

Among our key initiatives are:

- Partnering with public and private organizations to ensure the Boston Harborwalk's open spaces are accessible and beneficial to all communities.
- Reducing barriers to the Boston Harbor Islands by improving transportation options and affordability, making these unique destinations more accessible to everyone.
- Developing programs, events, and outreach efforts that address the needs of underrepresented communities while celebrating Boston's diversity, ensuring their voices, cultures, and connections are represented and brought to life on the waterfront.
- Advocating for policies and investments that prioritize equitable access and climate resilience to protect these spaces for generations to come.

These actions reflect our belief that the harbor should be a place where everyone feels they belong—a place that connects, inspires, and serves all communities of the region.

In this report, we reflect on how the data helps us better understand how people use public spaces on the Harbor in Boston. We explore social barriers to access, and we talk to families who feel a joyful sense of connection to the waterfront and some of the people working at the community level to increase representation and belonging.

"What this study does is help Boston Harbor Now and other institutions reframe perceptions about Boston's harbor to make sure it works for people across the city and the country and for visitors, and not just for developers," John Connors says. Connors is the CEO of Boathouse, a marketing and communication consulting firm, and he serves as Boston Harbor Now's Marketing Committee chair. "That's the challenge, asking, Who does the harbor work for? And the data in this report is a nice reminder that we're serving the people."

Connors points to **The Boston Foundation**[2] as a pioneer in using data to understand and address poverty and equity in the city.

"When you quantify something that hasn't been quantified, you have the power to frame the debate. You can start being much more deliberate. It's like stepping on the scale every morning.

"Now, with the use of technology, we can quantify who visits the Harbor. Instead of everyone having their own version of Boston, the data helps us see what Boston actually is. Now the opportunity is to continue to quantify this and use that data to drive debate and discussion and make sure there is a greater purpose in what we do."

To this end, we hope the Waterfront Visitation and Equity Study will serve as a model for organizations striving to better understand who visits parks and public open spaces, and who is not. By identifying patterns of access and gaps in representation, this project demonstrates the power of data to reshape not only how we see public spaces but also how we can create meaningful opportunities for everyone to benefit from them.

Our goal is to inspire others to embrace thoughtful data-driven strategies that inspire tangible actions—breaking down barriers, addressing inequities, and building programs and spaces that serve the full diversity of our communities. **Ultimately, we can collectively reimagine public spaces as places that welcome and serve all people.**

WATERFRONT VISITATION & EQUITY STUDY

INTRODUCTION

KATHY ABBOTT

A walk along Boston's waterfront is a walk along one edge of a thriving city: there's the gathering of iconic buildings; planes headed for and from Logan Airport; the cargo ships and tugboats heading into and out of the port; the Institute of Contemporary Art, an architecturally bold building that rose up from a field of dilapidated piers and wharves, but then gave way to gleaming glass towers that house the city's newest economic engines of finance, technology, life sciences, and tourism.

Because it's Boston, this progress stands on a great deal of history. The city's chronicles stretch from Native Americans who stewarded the land and waters before European colonization. Boston itself was built on the Shawmut Peninsula, which eventually grew as wetlands were filled to enlarge Boston's land mass to support more settlers.

Today, the Boston Harborwalk, which stretches 43 of the 47 miles of the Boston Harbor coastline, is built on these reclaimed tidal mud flats. And because it's Boston, there are also revolutionary stories of social and environmental progress. Thanks to critical public investments, Boston Harbor, which was choked by pollution from centuries of misuse, became one of the cleanest harbors in the country.

The Central Artery, the massive highway that cut the city off from its waterfront, was, thanks to the **Big Dig project**[3], submerged underground making it not only easier but inspiring to walk across the Rose Kennedy Greenway to the Boston Harborwalk that runs along the water's edge. And the Boston Harbor Islands, also full of history, pollution, and potential, have become a National and State Park.

One common thread in these efforts is a willingness to take on the hard work of enacting visionary change. Boston Harbor Now has spent decades tackling the challenges of driving equal access to the waterfront and islands so that all of Boston's visitors and community members feel welcome and experience the joy and benefits of being in a city on a harbor. Boston could be a city that offers residents and visitors "radical hospitality"—a commitment to ensuring that every person feels not only welcomed but also connected, with opportunities to experience the full richness of Boston Harbor's public open spaces. Everyone should feel that they belong.

The next phase of this work is to use the findings from the Waterfront Visitation and Equity Study to make Boston Harbor Now's and other stakeholder's work impactful. Using mobility data and on-the-ground surveys, the Visitation and Equity Study makes it clear that not everyone is benefitting equally from the waterfront, despite the best and current efforts that have been made. Now, the goal is to achieve data-informed equity, increasing access to ensure that people who don't usually come to the waterfront — such as immigrants, people of color, and residents of various neighborhoods — feel welcome and a sense of belonging.

There is a great deal of value in increasing access to cities' public waterfront spaces — what some researchers call urban blue spaces. One advantage is promoting health and wellbeing, connecting people to nature, addressing social inequality, boosting social interactions and cohesion, and

> "We want every single kid who grows up in the city of Boston to grow up knowing that they have this incredible harbor. It belongs to them, and it's theirs to use. But when I talk to people, there are still so many who don't know about the waterfront and islands and don't realize that it all belongs to them."
>
> KATHY ABBOTT

giving people a cool place to go on days that are increasingly hot because of climate change. Of course, the health benefits of public spaces are an old idea, one that guided the great landscape architect **Frederick Law Olmsted**[4], who designed New York's Central Park and Boston's Emerald Necklace for these same reasons. Today, understanding and expanding these health benefits remains a global priority. One research study of a publicly accessible canal in Glasgow, Ireland, published in 2022 in the **International Journal of Environmental Research and Public Health**[5], points to increased recreation and more cross-generational socialization. The study also notes that the "Heritage, histories and the restorative benefits of the canal shaped it as a symbolic space," adding, "Historic places symbolize community and belonging, 'the feeling' of a place and the canal's history teaches us about the past, uniquely shaping and changing our perspective on present-day Glasgow."

Boston Harbor Now President and CEO, Kathy Abbott shares a similar perspective about parks, explaining, "The seven dimensions of wellness are physical, emotional, spiritual, intellectual, social, environmental and vocational. You can quantify ways in which parks contribute to these, whether it's reducing healthcare costs by promoting physical activity, or improving kids' abilities to learn by spending time outside." All these benefits are happening in Boston, too. But not nearly as often as they could, and not as equitably as they might.

Boston has parks, bike trails, playgrounds, and the waterfront, compelling community assets that boost people's mental and physical health, making it crucial to understand who takes advantage of these spaces.

In its **Health of Boston 2023 Community Assets report**[6], the Boston Public Health Commission points to the importance of assets that provide settings for leisure, recreation, and exercise, and that improve "quality of life and well-being." "Understanding neighborhood differences in assets is important for improving and maintaining public health across Boston."

As the report notes, the average amount of open space in Boston's neighborhoods is 17.7%. The neighborhoods with the most open space are Hyde Park at 32.2% and Jamaica Plain at 30%. The neighborhoods with the least open space are Roxbury with 6.7% and the South End with 3.2%.

New mobility data shows that neighborhoods like the South End and Roxbury see about 0.6 to 1.2 visits per resident to Boston's waterfront, compared to Charlestown and the North End where residents average 2.3 to 5.4 visits each — underscoring stark disparities in per-capita access and use.

We are also mindful of Boston's well-chronicled history of exclusion, which has led to racially and **economically segregated neighborhoods**[7] and schools as well as a sense that some parks and open spaces are the unofficial property of their local neighbors and should not be used by outsiders, even if those outsiders are Boston residents from other neighborhoods.

The result is a kind of ownership gap, between Boston residents and Boston visitors who don't feel that the waterfront belongs to them. Fortunately, Boston continues to grow in its population and its openness. For this report, we interview residents who share multigenerational stories about how their families use the waterfront. We also talk to community leaders who can see how Boston's waterfront could emerge and become even more welcoming. *Abbott explains it this way:*

"We want every single kid who grows up in the city of Boston to grow up knowing that they have this incredible harbor. It belongs to them, and it's theirs to use. But when I talk to people, there are still so many who don't know about the waterfront and islands and don't realize that it all belongs to them."

Abbott started dreaming about what the waterfront could be early in her career when she was an island manager on Gallops Island, one of the Massachusetts State Park islands in Boston Harbor. During the day she welcomed visitors. At night, she stood on the island looking at the other nearby islands and at Boston's skyline, where the Federal Reserve Building would glow in the sunset.

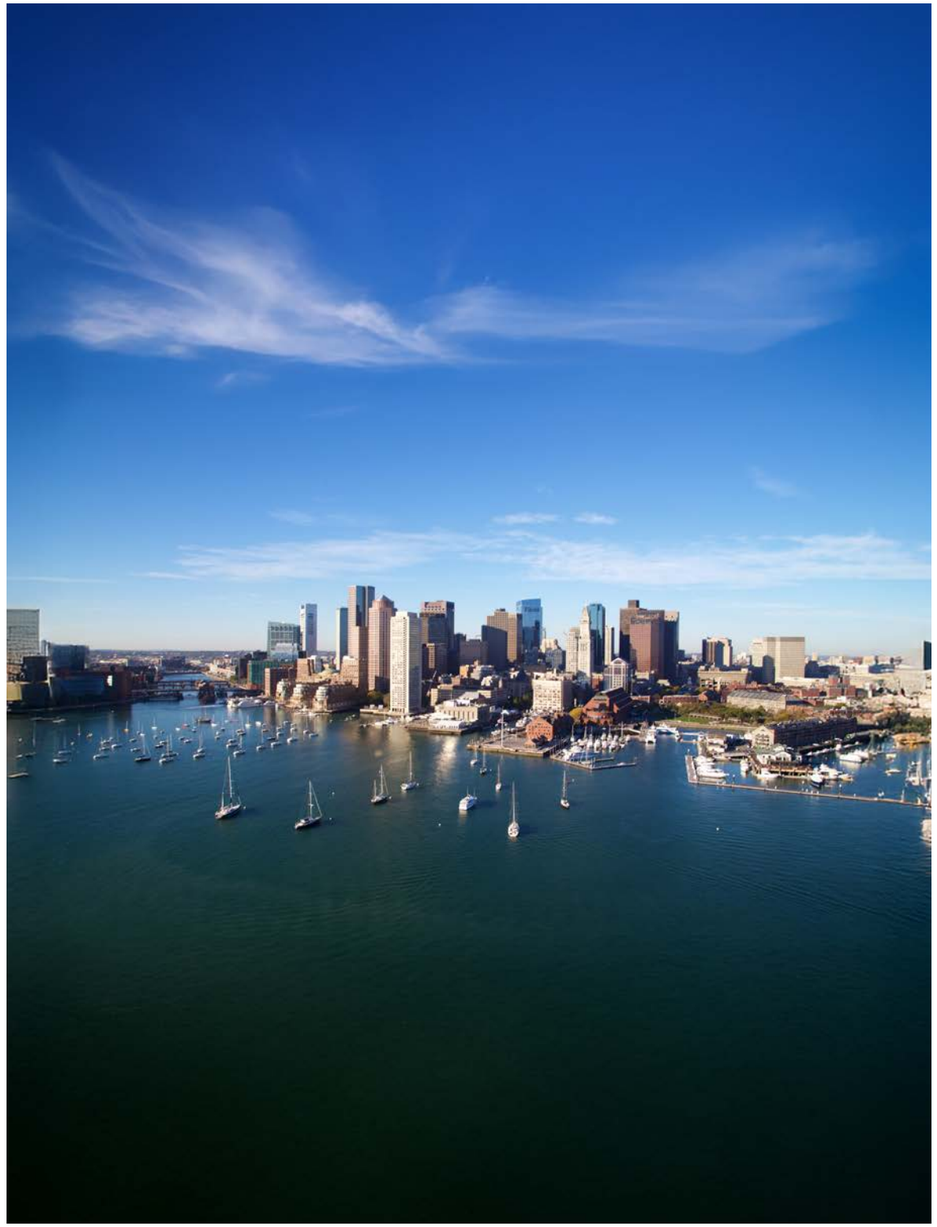
"I understood that these islands were this incredible environment so proximate to so many people, and they were perfect places to be able to help people understand their impact on nature and nature's impact on them."

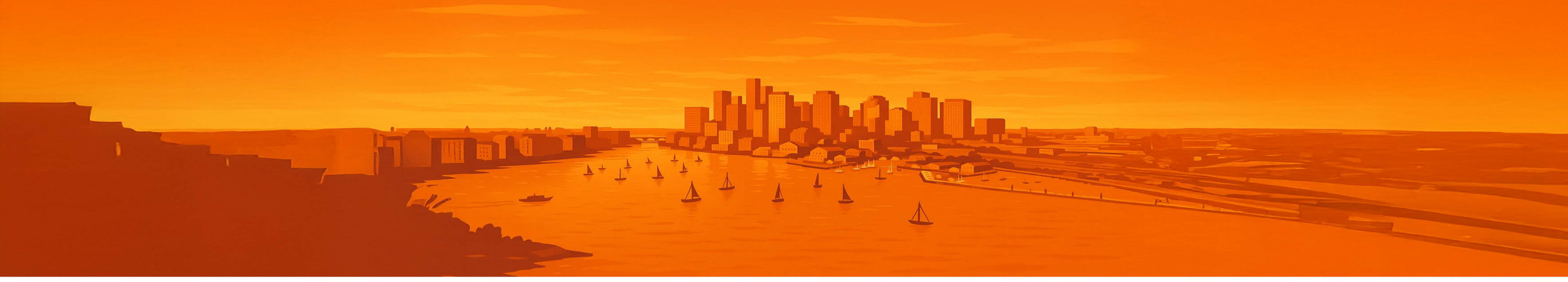
"The islands were used in more interesting ways back in the 1980s than they are today. It was cheaper to go there. When I went out there as a kid, I remember going to Georges Island on the weekends, the grills would be going and the picnic tables would be occupied by families of different economic backgrounds and ethnicities from all around the city. We labeled the islands a "neighborhood-free zone" because this wasn't that long after busing, but all these people were there having a good time."

Since then, Abbott has held numerous park and environmental positions in state government and in the nonprofit sector. She became President and CEO of the Boston Harbor Island Alliance just after the Harbor Islands became part of the National Park system. Abbott went on to serve as Commissioner of the State's Department of Conservation and Recreation (DCR). And she eventually joined Boston Harbor Now in 2016. It's a career that turned her old, grand dream of connecting people to nature

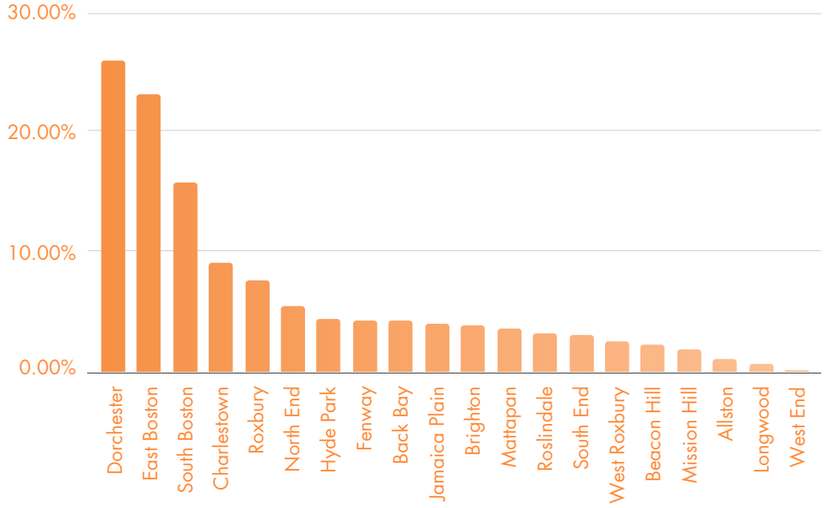
and to each other into the daily work of promoting engagement with Boston Harbor. This work, Abbott says, is about "making the waterfront relevant and giving people time and experiences in these places, so they start to build a relationship with the place and start to care. They want to come back and share these places and experiences with their families and their friends."

Abbott was encouraged by seeing more people visit the waterfront during the pandemic, and she had hoped that those visitation numbers would remain high. But after the pandemic, visitorship dropped. "But there is still a lot of untapped potential for Boston Harbor to benefit our City and our Region. There's a lot to do to bring more and more people to the water and to redefine ourselves as a waterfront city."





HARBORWALK VISITS:
VISITS BY BOSTON NEIGHBORHOODS



ACCESS DRIVES USE: Coastal and nearby neighborhoods show higher Harborwalk visits, reflecting the advantages of proximity and transit access.

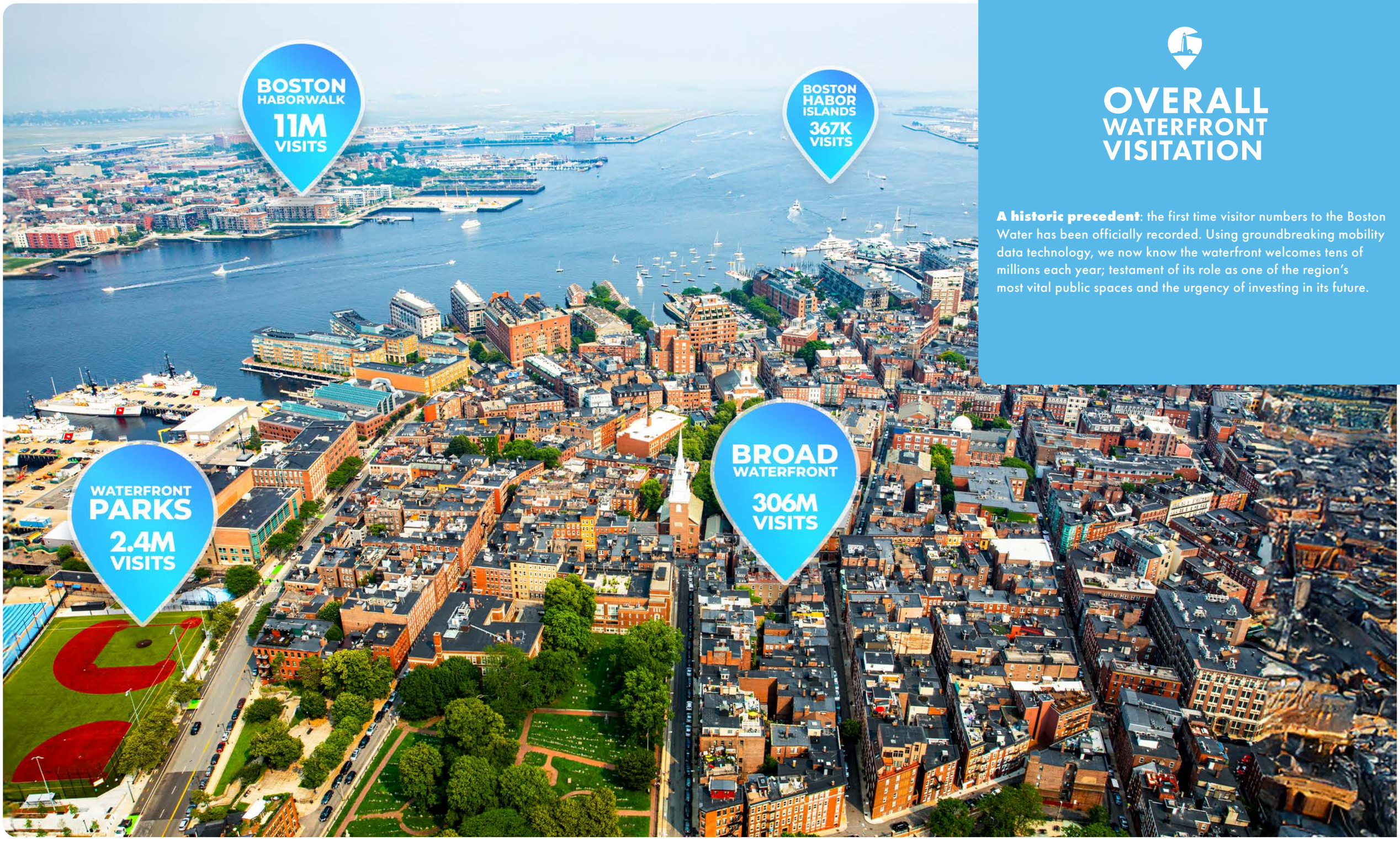
SOURCE: **VERASET**

25.4% DORCHESTER'S SHARE *of* VISITS

Dorchester alone accounts for more than a quarter of all Harborwalk visits. This outsized representation hints at proximity, community reliance on public space, or lack of alternatives elsewhere.

50% OF TOTAL VISITS FROM TOP 3 NEIGHBORHOODS

Dorchester, East Boston, and South Boston collectively make up approximately half of all visits. These neighborhoods are not just participants they define the Harborwalk's audience. This concentration raises questions about how accessible and meaningful the waterfront truly is.



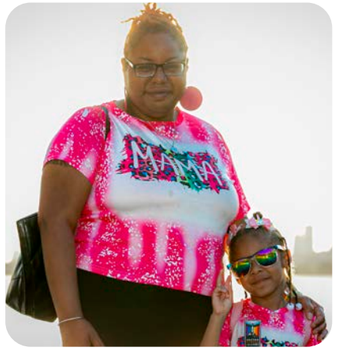
OVERALL WATERFRONT VISITATION

A historic precedent: the first time visitor numbers to the Boston Water has been officially recorded. Using groundbreaking mobility data technology, we now know the waterfront welcomes tens of millions each year; testament of its role as one of the region's most vital public spaces and the urgency of investing in its future.

Chapter 1

ACCESS TO BOSTON'S PUBLIC SPACES

Waketa "Keta" Robinson loves the water. She was born in Savannah, GA, but Robinson also spent some of her childhood in Boston, her mother's hometown. "Castle Island was a favorite in my family," Robinson says, recalling the times her mother took her there. "We would go to Sully's," a local restaurant, "get ice cream, get a hot dog. It was just so much fun. I went to summer camp here in Boston; and Castle Island was a weekly trip for us."



KETA & SOPHIA ROBINSON

Today, Robinson and her young daughter, Sophia, live in Roxbury, and Castle Island remains a family favorite. Robinson threw a birthday party for her daughter there, a celebration that took advantage of an enticing part of Boston's waterfront and a place where Robinson could invite three generations of her family and friends, from kids playing in the water to her uncle grilling hot dogs and hamburgers to keep the guests fed.

Robinson's Castle Island party marks a more open-hearted part of Boston. Robinson chose this setting because it attracts families and more diverse groups of people. It also feels safe and clean, a space where multigenerational families of different backgrounds can go and cook, laugh, and play music without being "othered," seen as too boisterous or too loud. Robinson enjoys the kind of waterfront experience that everyone in the city should be able to have, but barriers remain.

"Unwelcoming" is one of five barrier types identified by Roxbury and Dorchester residents that keep them away from all that the waterfront has to offer; in 2019, Roxbury-based nonprofit and Boston Harbor Now partner, The American City Coalition, published **Resident-Identified Barriers and Resident-Identified Solutions to Accessing Boston's Waterfront**[8], which documented input from 468 residents who also identified familiarity, affordability, transportation, and personal reasons as barriers.

In Boston, one tough barrier to overcome is a history of racial and economic exclusion. Although the city has been home to free and **enslaved Black people since the 1600s**[9], racial conflict has persisted alongside fights for racial justice. This tug-of-war between violence and progress exploded in the 1970s.

In 1974, court-ordered busing was supposed to integrate Boston's schools but ended up shredding its neighborhoods. For first graders and friends Robert Lewis Jr., who was Black, and Sal LaMattina, who was Italian, this meant seeing their East Boston community flooded with enraged racism. The result, Lewis told the **Boston Globe**[10] fifty years later, is that Boston developed a "global reputation" for racism, which the city is still addressing.

In 1975, an ongoing dispute broke out on Carson Beach when Black salesmen attracted the anger of white residents. In 2020, echoes of this history resounded when, as the **Boston Globe reports**[11], Racine Bell and Stacey Alves, two Black women, went to Carson Beach to commemorate Juneteenth and protest the killing of George Floyd. A man driving by used a racial slur, and Bell and Alves said they were scrutinized by State Police.

"...a lingering question about what it would take for everyone to feel welcome in the city's public spaces and for everyone to feel a sense of joyful ownership and belonging."

The Waterfront Data Project, Boston Harbor Now's extensive analysis of mobility data, shows that park visitation by people of color is low in Charlestown where racial violence also flared in the 1970s. By 1979, **an article in The New York Times**[12] noted:

"Black Bostonians avoid much more than South Boston. Charlestown is considered flatly off limits, East Boston and the North End risky. In addition, even if they avoid white neighborhoods, blacks have no guarantee of insulation from racial harassment. Although the most extreme examples of racial violence have occurred in the city's all-white enclaves, the most common occurs in changing neighborhoods. In the first six months of 1978, there were 161 racial incidents in the changing sections of Dorchester and Hyde Park alone."

Another factor that harmed Black communities was redlining, the federal government-approved practice of lenders refusing to grant mortgages to homebuyers looking to buy in Black neighborhoods. As the **Federal Reserve System explains on its website**[13], "The federal government played a key role in institutionalizing and encouraging redlining through the Federal Housing Administration (FHA). The FHA was the architect of federally sponsored redlining from 1934 until the 1960s."

Across the country, this meant even financially qualified buyers didn't have access to mortgages that would have helped them own homes and build wealth that could be passed to future generations. In 1968, the Fair Housing Act outlawed redlining and slowly paved the way for fairer lending practices. What remains in Boston today are racially segregated neighborhoods and families of color who are still chasing the dream of homeownership.

Today, unknown numbers of Boston residents of color quietly protest past injustices by refusing to go to parts of Charlestown, South Boston, or East Boston because of old wounds and current distrust. This is, of course, a personal choice, but it is also a challenge for Boston, a lingering question about what it would take for everyone to feel welcome in the city's public spaces and for everyone to feel a sense of joyful ownership and belonging.

The numbers from the analysis of mobility data suggest that change is possible, but also fragile. During the pandemic, when going outside was one of the least risky options for recreation, the number of non-White visitors increased. But by 2022, the number of non-White visitors had declined.
In addition, MassINC's analysis of five waterfront parks found that 62 percent of visitors were White, 15 percent were Latino, 11 percent were Black, and 7 percent were Asian or Pacific Islander.
There's also a correlation between ethnicity and neighborhood: people go to the waterfront spaces that are closest to their homes. Latinos, for example, tend to go to Piers Park in East Boston, a largely Latino neighborhood.

In urban planning, these kinds of usage trends are assessed by creating equity maps that estimate who needs and will benefit from investments in open spaces. In its **Open Space and Recreational Plan 2021-2025**[14], The City of Boston looks at South Boston and notes that while the Seaport District has led to the growth of a new neighborhood with gleaming new open spaces, there remains an unmet need for park access in South Boston's nearby public housing developments.

It's a deficit that Boston Harbor Now has been addressing by working with public agency partners at the Massachusetts Department of Conservation and Recreation and the City of Boston's Parks and Recreation Department to engage residents and volunteers in free community activities and clean-up work by hosting events throughout South Boston's waterfront in its largest waterfront parks from Moakley Park, and Carson Beach to Castle Island.

The Waterfront Data Project builds on this engagement work by more clearly showing who goes where. The data show that the waterfront attracts lower percentages of residents from Roxbury and Mattapan, two neighborhoods with higher concentrations of Black residents. Keta Robinson is an exception. But ask if there are any barriers to her use of Castle Island and, as much as she loves the park, she points to limitations that seem small but can have an impact.

"There are no grills," she says, which isn't just a matter of cooking. Grilling helps boost multigenerational socializing. Robinson also says Castle Island's tables are old and worn and need to be remodeled. But she praises the bathrooms, which, since Covid, have been kept quite clean. In essence, Robinson is pointing out that details and basic comfort matter. Attentive maintenance is a kind of welcome mat that reinforces people's sense of belonging.

Another factor? "Transportation," Robinson adds, pointing out that she knows the New York City subway system like the back of her hand. One train could take her from home in Williamsburg into Manhattan. But she finds Boston's system more challenging and uses Uber, a ride-share service, to get to Castle Island, an expense that limits how often she visits. One aunt, who is among the youngest in her generation, drives and picks up older aunts. Public transportation isn't quite easy enough or elderly-friendly enough. This highlights the need to factor physical abilities and accessibility—along with costs—into the conversation about equitable access.

John Connors, the chair of Boston Harbor Now's communications committee, sums up the importance of a welcoming environment by pointing to **Google's Project Aristotle**[15], which studied the factors that make workplace teams successful. The leading factor that drove success is psychological safety. It's a lesson Boston could use: ensuring that the harbor is a psychologically safe space for all its visitors. The power of welcoming people to the harbor is part of the Connors family legacy. **In 2007**[15], Mayor Thomas Menino talked to John Connor's father, Jack Connors, about the need for more summer opportunities for children.

Jack Connors was born in Boston's Roslindale neighborhood to an Irish family with a modest income. He went on to co-found the ad agency Hill, Holliday, Connors, Cosmopulos, and he became a leader of philanthropy in the City. As a child, Jack had visited Boston Harbor's Long Island with his parents. As an adult, although he was reputedly a terrible fisherman, he took his own children to the harbor to fish.

Jack Connors also knew, his son says, that he'd been lucky to have certain opportunities, so he responded to Menino by launching Camp Harbor View, which today serves more than 1,000 campers each summer and offers year-round programming.

> A lot of the kids who came to camp had never seen the harbor. A lot of the kids didn't know how to swim, and a lot didn't know how to ride a bike. One kid captured the impact of the camp on one of the radiothons they did. He said, I never knew the people there cared about me."
>
> JOHN CONNORS

"He had grown up at a time when elites in Boston kept the Irish, Italian, and Jews down, so he went about getting the power that he saw the elite have. And he always said it was his job to introduce the haves to the have-nots," John Connors says.

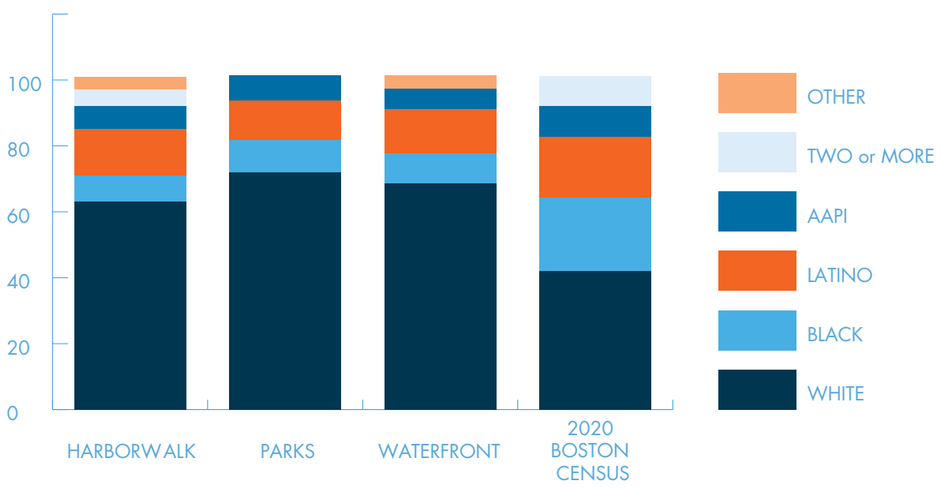
"A lot of the kids who came to camp had never seen the harbor. A lot of the kids didn't know how to swim, and a lot didn't know how to ride a bike. One kid captured the impact of the camp on one of the radiothons they did. He said, I never knew the people there cared about me."

Nestled in Jack Connors story is the role that income plays, which is backed up by the Visitation and Equity Study's data. In addition to revealing that visitors of color are underrepresented, the study also sheds light on the role income plays in waterfront visitation. During the pandemic and the reopening of cities, from 2020 to 2021, lower-income households increased their visitation to Boston's public open spaces (including parks, harborwalks, and islands), showing how essential these resources are to city residents. However, the high cost of visiting these spaces can undermine their long-term benefits. It will take a conscious effort to lower the costs of transportation, ferry tickets, dining, and events to ensure that people can sustainably visit and revisit.

Boston can't change the darker parts of its past, but it can build on its progress and on its generosity. Summer camps that welcome children and their families, and birthday parties and cookouts in public spaces are just some of the things that strengthen the city. Inviting a party guest — child or adult — who has never been to Castle Island or one of the Boston Harbor Islands is an invitation to get to know Boston better. These are among the key steps to changing Boston's reputation and how it welcomes people to its public spaces.

RACIAL DIVERSITY AMONG WATERFRONT VISITORS

WATERFRONT VISITORS SKEW WHITER THAN BOSTON'S POPULATION



ACCESS DRIVES USE: Waterfront Visitors: Although Boston is a diverse city, visitation to public waterfront spaces does not reflect the demographics of the city or the Greater Boston region

SOURCE: **VERASET**

DISPROPORTIONATE PRESENCE SHAPES THE WATERFRONT EXPERIENCE.

+19% point overrepresentation

Large representation of White visitors suggests that factors such as location, economic access, or cultural connections may make waterfront spaces more accessible or appealing to this group.

PUBLIC, BUT NOT BENEFIT

Access isn't equity

While the waterfront is a public good, its use reflects deeper social patterns, revealing who feels entitled to space, who has proximity or time, and who is systemically excluded. The data presents an important call to not only count presence but to cultivate belonging across racial and socioeconomic lines in public open spaces.

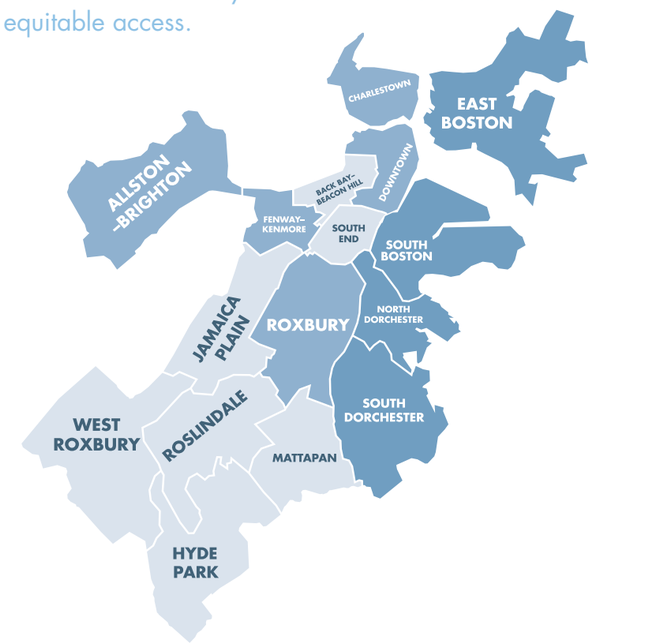
MISSING FROM VIEW

BIPOC Bostonians — who collectively make up nearly 60% of the city's population are significantly underrepresented across all public waterfront visitation, comprising less than 40% of visitors in most cases. This suggests systemic disparities in access, invitation, or belonging of Boston's coastal public spaces, reinforcing the need to examine equity in urban open space planning.

VISITATION NEIGHBORHOOD BREAKDOWNS

HOME OF HARBORWALK VISITORS

DISPARITY IS GEOGRAPHIC: This pattern underscores how distance from the Harborwalk—and likely the lack of direct transit routes or infrastructure limits equitable access.



LOW VISITATION
EFFECTIVLEY EXCLUDED

SEMI-CONNECTED

HIGH VISITATION
ACCESSIBLE

SOURCE: **VERASET**

3 *of* 4 TOP VISITOR NEIGHBORHOODS ARE WITHIN THE WATERFRONT

3 of the top 4 neighborhoods with the highest visitation Dorchester, East Boston, South Boston are directly on or near the harbor.

AREAS OF LOW ENGAGMENT

10+ NEIGHBORHOODS FALL BELOW 3% VISITATION

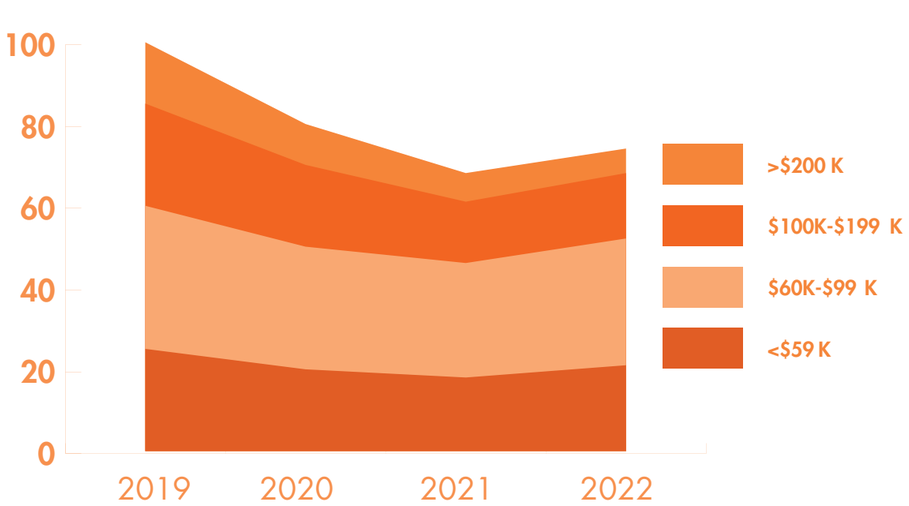
Mostly in the western and southern parts of Boston. Entire communities remain disconnected from the waterfront.

CONCENTRATION NEAR THE SHORE

Over 50% of all recorded visits come from just three waterfront neighborhoods—Dorchester, East Boston, and South Boston. These areas sit directly on transit lines and have long-standing cultural ties to the harbor, creating a self-reinforcing loop of access, familiarity, and repeat visitation that other neighborhoods have yet to experience.

VISITATION INCOME BREAKDOWN

MOST HARBORWALK VISITORS EARN UNDER $100K.



DISPARITY IS ECONOMIC: Most Harborwalk visitors have annual household incomes below $100K, reflecting strong use by middle- and working-class communities. Efforts to expand accessibility and engagement should prioritize these groups.

SOURCE: **VERASET**

72%

OF HARBORWALK VISITORS EARN UNDER $100K

Making lower- and middle-income residents the majority of who uses the park. This signals that investment in public space has the greatest impact when centered around income accessibility.

$100K+ VISITATION FELL 10PTS FROM 2019 TO 2022

Higher-income participation dropped significantly, signaling diverging relationships with public space post-COVID.

LOW-INCOME EARNERS MAINTAIN PRESENCE

Low-income earners accounted for 21% of Harborwalk visits in 2022—holding steady even as higher earners stepped back.

Chapter 2

BUILDING A RESILIENT AND WELCOMING WATERFRONT

NIKI & DEMANI SEMNACK

There are a lot of benefits for Boston residents who feel connected to the waterfront. Niki Semnack and her 14-year-old son Demani live in Charlestown and love the waterfront. As a child, Niki went to the New England Aquarium and Georges Island with her mother. These days, she walks along the waterfront with Demani and Taylor, their bold and fearless chihuahua.

When they come from North Station, they walk through the Charles River locks. There are sprinkler pads along the Rose Kennedy Greenway. There are fireworks in Christopher Columbus Park. Demani also hangs out with friends on the waterfront. And there's the peace of being on the shared edge of the city and the ocean, where the view will spark conversations and plant the seeds of memories.

"It's the perfect sitting spot," Demani, a student at East Boston High School, says. "There are a bunch of benches right there. The water is a nice distance away. You get a beautiful view of the ocean. You can see people coming off the docks from the ferry. Yeah, you can see people coming off a ferry from there. And honestly, it's where a lot of the foot traffic is. It's a good spot for everything."

"In the summertime, especially, we like to venture out to Castle Island," Niki adds. "We walk around the loop. We stop at Sully's to get something to eat. Once a year, we have to go to Sully's when it opens." Thanks to a National Park Service education program that he enrolled in during Covid, Demani also spent time learning more about the Boston Harbor Islands. One focus was Spectacle Island and how it became a dumping ground and how adding more trash and soil from the Big Dig ultimately expanded the island.

Then in 1992, when the Big Dig began in Boston, **as the National Park Service**[17] explains, "The Central Artery/Tunnel Project brought sediment to Spectacle Island to cap off the landfill and turn the island from an abandoned garbage dump to a park."
Niki and Demani's connection to the waterfront is inspiring, although Niki admits that transportation is a challenge since they don't have a car, and public transportation requires switching from the subway to the bus.

And she points to the more expensive parts of the waterfront, like the Seaport District, where she and Demaine spend less time. Nonetheless, the waterfront is a regular part of their lives. Unfortunately, their experience is less common than it should be. Not only are some people unaware that Boston has a waterfront or what the waterfront offers, but many of them feel it isn't welcoming, a finding that was shared in 2019 when the **Conservation Law Foundation commissioned a report**[18] from the MassINC Polling Group that analyzed survey data on people's opinions of the waterfront. Two of the report's key findings:

"Use of the waterfront varies among different demographic groups, with 65% of white residents having visited the Waterfront 3 or more times in the past year compared with 44% of non-white residents," and Seven in ten Boston residents (69%) believe that the city's Waterfront is welcoming and accessible to all. But a quarter of Black residents and 20% of Hispanics say not feeling welcomed is a major obstacle to visiting the Waterfront.

The Waterfront Data Project provides statistical support for this concern. Although Boston became a **"majority-minority city"**[19] in 2000, (**by 2020**[20], 44.6 percent of residents were White) most of the people who visit all the areas of the waterfront are more than 63 percent White.

“It’s the perfect sitting spot”

Demani, a student at East Boston High School, says.
“There are a bunch of benches right there. The water is a nice distance away. You get a beautiful view of the ocean. You can see people coming off the docks from” the ferry. Yeah, you can see people coming off a ferry from there. And honestly, it’s where a lot of the foot action is. It’s a good spot for everything.”

This is most pronounced in the Boston Harbor Islands visitation data where the analysis of mobility data found that 74.21 percent of visitors are White; 8.17 percent are Latino; 6.73 percent are Asian American or Pacific Islanders; 5.82 percent are Black; 3.02 percent are two or more races; and 2.04 percent are identified as “other”.

The 2023 MassINC ground survey data concurs, revealing that 62 percent of visitors to the five Waterfront Parks that were studied are White; 15 percent are Hispanic or Latino; 11 percent are Black; 7 percent are Asian American or Pacific Islander; 3 percent are more than one race; and the rest fall into other categories.

The ongoing challenge for Boston is to open its doors more widely so it can draw more people in. This is work that Olawumi “Ola” Akinwumi has been doing. Akinwumi is the founder, CEO, and Creative Director of AfroDesiaCity Productions, a Boston-based event planning and consulting company, and she has been working with Boston Harbor Now to host waterfront events. During the pandemic, this meant inviting artists to participate in virtual events.

“It was a great way to keep people in touch with what the Harbor offers and a great way to diversify audiences,” Akinwumi explains. As the city moved back to in-person events, Akinwumi ramped up her planning, bringing more artists to waterfront spaces, and hosting events called Soulful Bliss: Arts and Music Festival series, which includes a round-trip ferry ride to Spectacle Island where the events take place.

There’s music, food, dancing, a diverse group of vendors, and a panoramic view. To boost accessibility and outreach, Akinwumi’s events have featured Boston native Andre Robinson, also known as DJ Deaf Tunez, who was born with hearing loss. Over time, Akinwumi has been weaving more communities and artists of color into the fabric of the waterfront. But she says there is still much more work to do. She would like to see more done to make the waterfront more attractive to younger generations.

> “It’s a matter of understanding the culture of how people communicate and congregate. It’s navigating culture and authenticity”
>
> OLAWUMI AKINWUMI

“I compare it to theater,” Akinwumi adds. “So many of the people who are buying tickets are baby boomers, and so are many of the people who are coming to the islands. Most of the baby boomers I’ve observed visiting the islands have been White. However, there’s a growing interest among BIPOC communities, including baby boomers, in engaging with the islands, especially when culturally relevant events and programs are offered. Accessibility and inclusive programming play a significant role in making these experiences appealing to a more diverse audience.”

“There are also so many opportunities to build relationships and educate people about the waterfront. In their minds, people always feel that if they’re not asked to be at the table, they’re not going to try to learn about everything that’s going on,” from keeping the Harbor clean to climate change to great events.

> And we don't want the waterfront to have a reputation of only being for wealthy people. People who think this end up rejecting themselves from this environment"
>
> VERONICA ROBLES

"It's a matter of understanding the culture of how people communicate and congregate. It's navigating culture and authenticity." Veronica Robles agrees. Robles is a professional mariachi singer, musician, dancer, choreographer, and cultural activist who was born in Mexico and moved to the Boston area where she founded the Veronica Robles Cultural Center in East Boston. She's also involved in helping Boston Harbor Now welcome more members of the Latino community to the waterfront through cultural programming.

Robles praises Community Cruises, one of Boston Harbor Now's free access programs that try to lower the barriers of getting people onto the Harbor and Islands. In the beginning, people were hesitant about coming. Everyone was "very busy." People were also concerned about costs and transportation, but once they began to come, they were happy.

"The cruises bring together people from different places to celebrate like a big family. For people who come from other places and other countries that are near water, they need to understand that even if they don't have a lot of money for a vacation, they do have access to the waterfront. Being at the waterfront can make summers more enjoyable, and it can make people from other places feel closer to home. Once or twice a week, people who work really hard should be able to go and enjoy the water."

Robles says increasing access would mean sharing more information about what's happening at the waterfront and how best to get there. Transportation websites should be easier to use, and they should be multilingual.

Robles is also concerned about gentrification. "And we don't want the waterfront to have a reputation of only being for wealthy people. People who think this end up rejecting themselves from this environment." A more serious part of engaging people, Robles says, is educating them about how the waterfront will be impacted by climate change. Indeed, understanding climate change is a key component of creating a welcoming space.

"One of the biggest challenges is the rising sea level and how to make the waterfront resilient and protect the neighborhoods, the city's tax base, and infrastructure along the waterfront," Bud Ris says. Ris is the former president and CEO of the New England Aquarium as well as a senior advisor on climate change for the Boston Green Ribbon Commission and one of Boston Harbor Now's trustees.

"I've seen a lot of change. The area used to be a vast wasteland of unused waterfront and parking lots. And there are still issues around gentrification and other challenges, but the waterfront is much better for the public than it was 50 years ago. Now what we need are shore-based solutions that are designed to keep the water out. The water is projected to rise 20 inches by 2070.

"So we have an opportunity, not only to protect the neighborhoods, but also to provide much better public access as we do that, which means broader harbor walks, elevated properties and assets, more landscaped grounds that go down to the waterfront, and more 'perpendicular assets' that lead more people to the water."

Ris says Boston has identified about **100 projects**[21] that must be done to build a continuous line of protection around the waterfront. The cost hovers between $4 billion and $10 billion. "It's Big Dig pricing territory in terms of the scale of what we have to do. So I think we need private development on the waterfront that benefits everybody, and I think there's a way to do that if you make sure you've got great open space and great access and you have great amenities at various price points in those places.

> I've seen a lot of change. The area used to be a vast wasteland of unused waterfront and parking lots. And there are still issues around gentrification and other challenges, but the waterfront is much better for the public than it was 50 years ago.
>
> BUD RIS

As we see changes in what government funding might or might not be available, I think getting the private sector involved is really important."

Ris says the work will include elevating the Harborwalk and neighboring properties. It will also mean forging an alignment among the many owners of waterfront properties: the private owners as well as the City of Boston, Commonwealth of Massachusetts, and the federal government.

"The key to keeping the water out is getting five or 10 properties in a row to all work together to build a common line of what we call a common line of defense along the water."

Boston's waterfront isn't alone. Some of this work has been done in the city's Fort Point Channel neighborhood as well as in New York City, Broward County, FL, and Galveston, Texas.

For Ris, Boston is rich in untapped potential. "The waterfront," he says, "is still a massively underutilized resource. So many people go through hell to go to Martha's Vineyard, when we have so much to offer them right here."

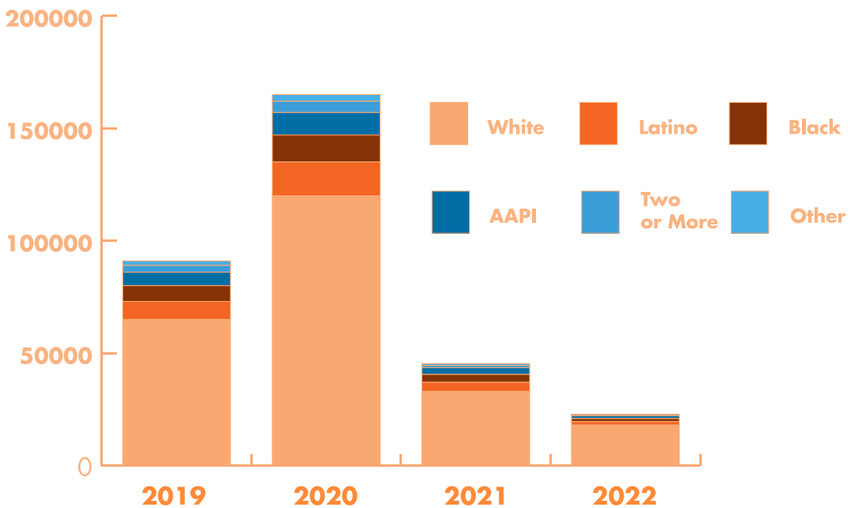
Of course, increasing access and education are vital, but, as the Equity Study shows, bringing people to the waterfront is only the first step. The second step is getting them to come back. The third step is to feel a true sense of belonging. Despite the popularity of community cruises, Free Ferry Days, and other access programs, the mobility data shows that repeat visitors were less likely to return after Free Ferry Days, but those who did return did so more frequently.

In addition, repeat visitors to the Boston Harbor Islands were often Dorchester and Quincy residents, however in 2020 East Boston visitors took the lead. Building a widespread sense of waterfront belonging and ownership also has the potential to raise public awareness and excitement about efforts to battle climate change.

The study's findings and the city's climate challenges raise the question about how to bridge the gap between increasing access and boosting the kind of meaningful, long-term engagement that Charlestown residents Niki and her son Demani have with the waterfront — especially for people who don't live near the water and don't feel welcome there.

ISLAND VISITATION BY RACE

BIPOC VISITORS UNDERREPRESENTED IN ISLAND USAGE



ACCESS DRIVES USE: Post Pandemic Visitation Trends: After a 2020 surge in visits across all demographics, Boston Harbor Islands visitation declined in subsequent years, with White visitors making up the majority.

SOURCE: **VERASET**

70%

PORTION OF VISITS BY WHITE RESIDENTS

White visitors make up the vast majority of traffic, highlighting a skewed pattern of use compared to diverse population.

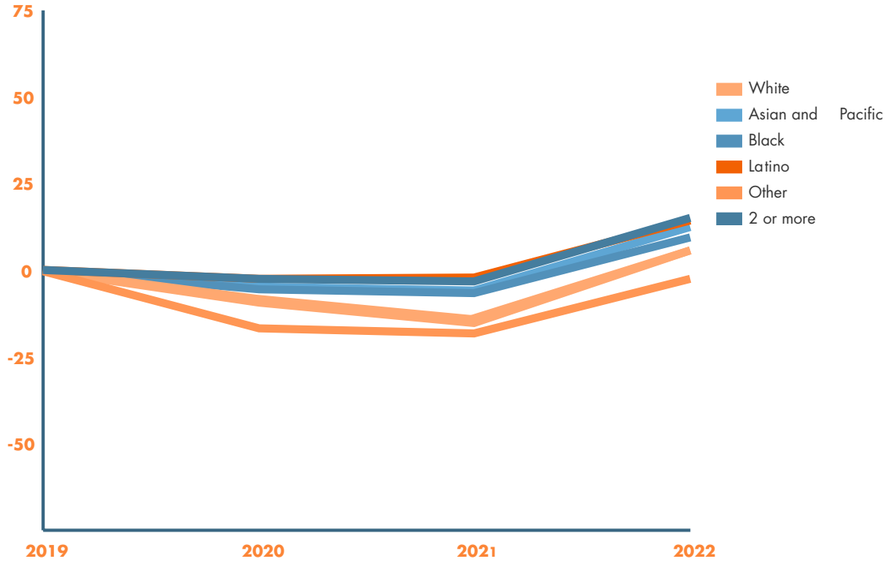
+150K

VISITS IN 2020

WATERFRONT VISITATION THROUGH THE PANDEMIC

BROAD WATERFRONT VISITS FELL SHARPLY, THEN REBOUNDED.

This chart shows public waterfront visitation by race from the pandemic through the reopening period. While visitation dropped across nearly all groups in 2020, White and Asian visitors saw the largest declines and were the slowest to return to pre-pandemic levels.



SPATIAL AGENTS: Outdoor spaces became lifelines—especially for BIPOC communities navigating pandemic restrictions.

SOURCE: **VERASET**

14.7% → 2022
STRONGEST BOUNCEBACK

Latino visitors saw the strongest recovery—surpassing 2019 levels and signaling high reliance on these spaces.

-15%
DECLINE&RECOVERY
2021

White visitation dropped steeply by 2021, showing broad waterfront decline before recovery.

WHO DIDN'T COME BACK

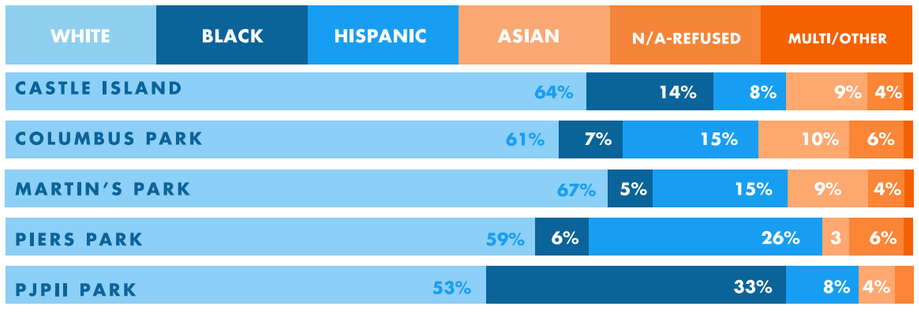
Mobility data from 2020 through 2022 revealed that the group least likely to return to Boston's waterfront after the onset of the pandemic were visitors who were white, highly educated, and more affluent. While many other demographic groups saw visitation rebound as public spaces reopened, this segment's return lagged noticeably.

The trend suggests that shifts in work patterns, travel habits, and leisure preferences during the pandemic may have had a lasting impact on how and how often these residents engaged with the waterfront.

WALKS IN THE PARK

2023 PARK VISITOR SURVEY DATA COLLECTED FOR DATA VALIDATION SUB-STUDY.

In the summer of 2023, Boston Harbor Now partnered with The MassINC Polling Group on a "ground-truthing" validation study to compare real-world park use with visitation estimates derived from Veraset's cell phone location data. Over several weeks, trained data collectors visited five Boston waterfront parks to count visitors, track occupancy, and conduct short in-person surveys



DISPARITY IS STRUCTURAL: This sub-study compared in-person counts and surveys from MassINC with anonymous cell phone location data from Veraset to see how closely the two methods matched. The survey responses captured details like visitors' race and home neighborhoods, which were then compared with patterns in the mobility data.

SOURCE: **MASSINC**

67 PERCENT **OF VISITS** AT MARTIN'S PARK **IDENTIFIED AS** WHITE RESPONDENTS

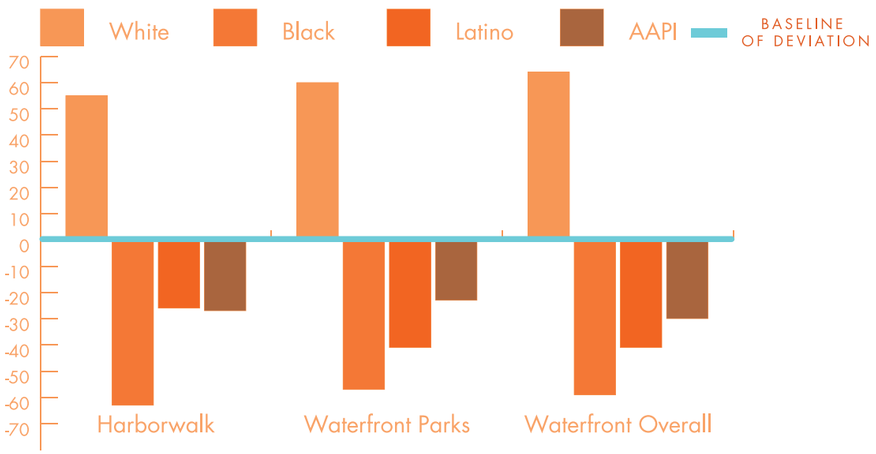
33 **PERCENT** BLACK **VISTORS** AT PJPII PARK

26% HISPANIC PRESENCE AT PIERS PARK

GAPS IN REPRESENTATION

VISITATION GAPS REFLECT BARRIERS IN ACCESS

Each bar measures deviation from an equity baseline where visitation aligns with a group's share of Boston's population (2020 Census). This baseline of deviation is set at 0%.Values above it indicate overrepresentation; values below; underrepresentation.



REPRESENTATION REVEALS ACCESS: BIPOC communities are consistently underrepresented across waterfront spaces, pointing to disparities shaped by historical exclusion, urban design, and transportation access.

SOURCE: **VERASET**

UNDERREPRESENTATION

BIPOC underrepresented by as much as –63%
Across the Harborwalk, waterfront parks, and other public areas, AAPI, Black, and Latino visitors remain noticeably underrepresented. This isn't limited to one site, it's a consistent pattern tied to access, visibility, and a sense of belonging. It's about a broader pattern of subtle exclusion, recurring from benches to shorelines, pathways to parks.

PATHS TOWARD PRESENCE

Repairing and connecting
How might we begin to shift the patterns of who shows up and benefits from the region's public blue and green open spaces. It could start with better transit connections, clearer signage, or programs that reflect the cultures of those less often seen there. It may mean working more closely with nearby communities not just asking them to come, but asking what would make them stay. Small moves, more benches, more shade, more reasons to return.

PRESENCE, PRIVILEGE, AND THE QUESTION OF ACCESS

Why do some residents appear so prominently along Boston's waterfront? The answer may lie in the legacy of coastal proximity, stronger ties to transit routes, and a quiet assurance that these public spaces were always meant to include them. These are not just coincidences they are patterns rooted in decades of planning, access, and familiarity. The challenge ahead: how do we reshape these conditions so that those historically held at a distance feel equally present, equally welcome, and equally at home?

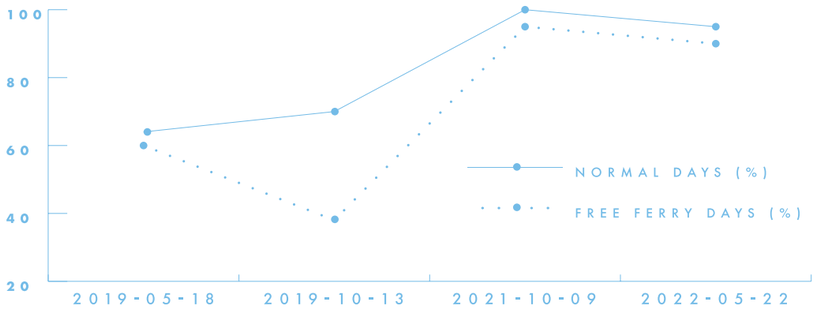
SOLUTIONS IN PRACTICE

OPENING ACCESS, LEARNING IMPACT.

Boston Harbor Now

FREE FERRY DAY

This chart reflects a clear precedent: turnout rises with free offerings, but without strategic follow-up, engagement plateaus or falls short. The goal now is not just to increase visits — but to deepen the relationship between residents and the waterfront through smarter, more sustained outreach.



BUILDING ENGAGEMENT THROUGH ACCESS: Boston Harbor Now is working to bring more communities into connection with the Harborwalk and its surrounding resources. While initiatives like Free Ferry Day aim to lower barriers and invite broader participation, the data reveals that access alone isn't enough.

SOURCE: **VERASET**

Free Ferry Day, though well-intentioned, fell short in drawing lasting engagement to the Boston Harbor Islands. To inspire stronger outcomes, we're showcasing how other organizations are testing programs—tours, shuttles, and wellness events—that remove barriers and fosters more belonging for diverse communities with this public space.

GreenRoots

CAMINATAS VERDES: WALKS FOR BELONGING

Caminatas Verdes is a community walking group in East Boston, led by GreenRoots, that aims to explore the neighborhood's green open spaces, coastal gems, and urban areas while building community and advocating for health, environmental justice, and improved infrastructure like accessible walking paths. Caminatas brought Spanish-speaking immigrants down a waterfront that had changed rapidly in recent years and assured them that it was still accessible and welcoming to them.

greenrootsej.org

Photo Credit: WalkMassachusetts, GreenRoots Caminatas Verdes 2024

Coalition for a Resilient and Inclusive Waterfront (CRIW)

WATERFRONT WELLNESS WEEKENDS

Since 2022 the Coalition for a Resilient and Inclusive Waterfront (CRIW) has led annual Waterfront Wellness Week festivals for the public to experience the many benefits of Boston's blue open spaces. In 2025, CRIW highlighted 53 free events hosted by 12 partners with opportunities for participants to exercise, participate in river and park cleanups, partake in cultural celebrations and explore art installations.

bostonwaterfrontcoalition.org

Photo Credit: CRIW, Wellness Week 2025

The American City Coalition

WATERWAYS AMBASSADOR PROGRAM

Formalized in 2024, highly-engaged participants are trained on the benefits of waterfront access. Ambassadors are advocates in their communities, share knowledge with waterfront program participants, and co-create materials and strategies to expand waterfront use by Roxbury and Dorchester residents.

tamcc.org

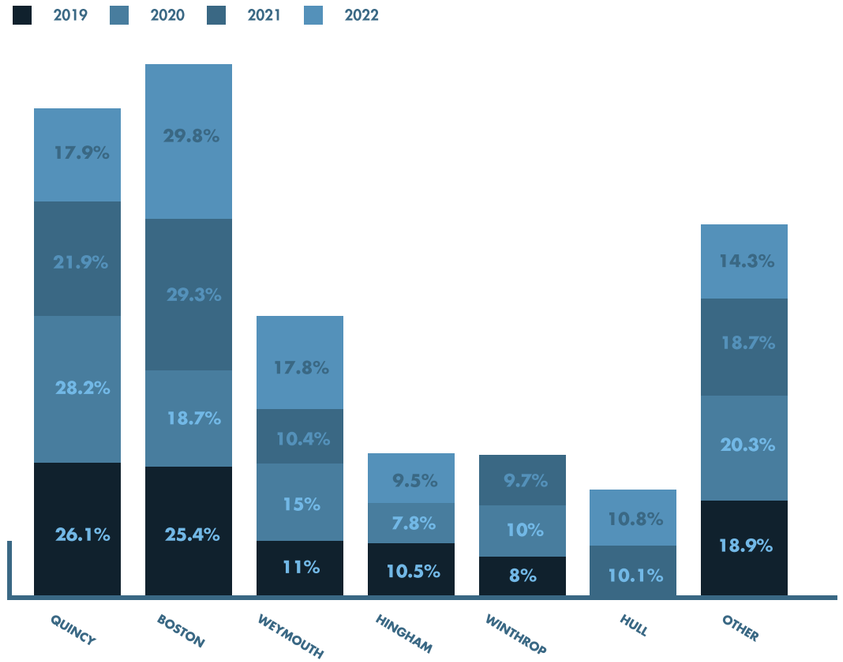
Photo Credit: Vania Arroyo, The Joy of Kayaking 2024

SOURCE: **VERASET**

BOSTON HARBOR ISLANDS NATIONAL & STATE PARK VISITOR'S HOME CITY

URBAN PROXIMITY DRIVES ACCESS

This chart shows each municipality's share of the total annual visitation to the Boston Harbor Islands National and State Park.



CITY TRENDS DIVERGE: . While all cities contribute to Harbor Island visitation, their internal year-by-year patterns vary widely.

SOURCE: **VERASET**

IN 2022 29.8% OF BOSTON RESIDENTS

Each bar shows how a city's annual visits break down over time, revealing consistent or shifting engagement across four years.

IN 2020-22 18.9% - 14.3% OF OTHER CITIES

While not leading in volume, cities outside the core group maintained a steady presence each year, showing ongoing but modest regional engagement with the Harbor Islands.

IN 2020 28.2% OF QUINCY RESIDENTS

Quincy reached its highest share of visitors during the pandemic, marking the single largest contribution from any city across all four years of data.

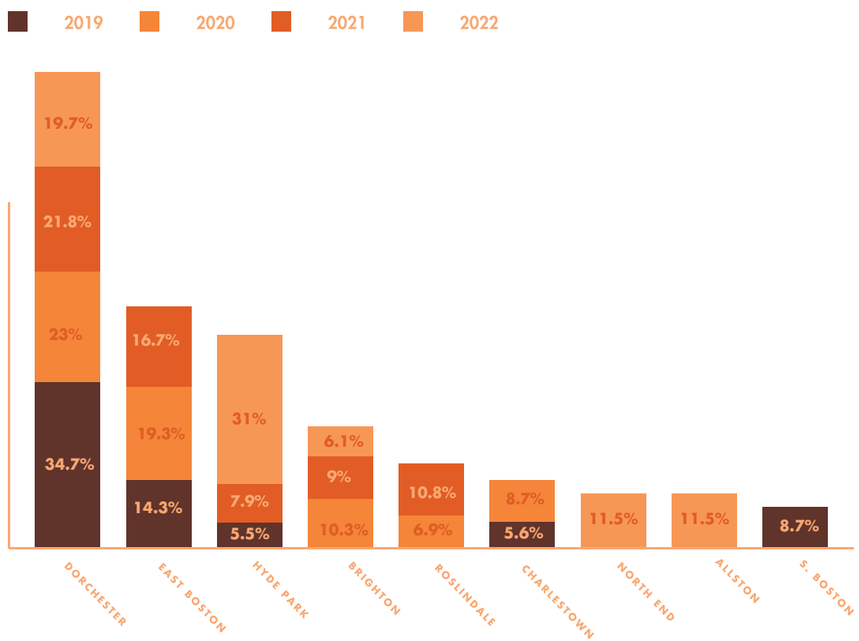
SHIFTS REFLECT LOCAL DYNAMICS

The variation in percentages across years signals more than seasonal change. It reflects how each municipality's access, transit links, and local engagement programs directly influence Harbor Island visitation.

When transit options expand or community outreach intensifies, certain municipalities see noticeable growth, while others plateau—showing that these islands remain tightly bound to the rhythms of local infrastructure and community attention.

HOME NEIGHBORHOODS OF BOSTON HARBOR ISLAND VISITORS

This chart shows each Boston neighborhood's share of the total annual visitation to the Boston Harbor Islands National and State Park.



PROXIMITY IS POWER: Dorchester, East Boston are consistently in lead within Harbor Island visits—not due to affluence, but because of closeness, density, and community-rooted relevance.

SOURCE: **VERASET**

34.7%→ 19.7% DORCHESTER'S PRESENCE DIMINISHES

From leading all visits in 2019, Dorchester's share dropped by nearly15 percentage points by 2022 raising questions about outreach continuity, transport equity, or shifting public sentiment.

33.7%→ 20.2% FEWER NEIGHBORHOODS, HIGHER CONCENTRATION

The broad "Other" category fell in 2022—marking a shift from diffuse city-wide participation towards more focused neighborhood engagement. The core is tightening, raising both concerns and opportunities.

HYDE PARK'S 2022 SURGE +25.5 PTS

In just three years, Hyde Park grew from 5.5% to 31% of total visits becoming the leading neighborhood by far. A sign of targeted engagement? New transit access? The shift marks a pivotal opportunity to study successful inclusion.

MOBILITY SHAPES VISITS

Year-to-year shifts show that outreach and transit access drive who comes to the Harbor Islands—seen most clearly in Hyde Park's surge to the top in 2022, proving that improved connections can redefine a neighborhood's presence.

Hyde Park's dramatic surge in 2022 reflects the catalytic effect of improved routes and targeted outreach, while Dorchester's steady drop illustrates how even historically dominant communities lose ground when access and programming wane. East Boston's consistent showing underscores how stable transit corridors and ingrained connections anchor a neighborhood's ongoing participation.

Chapter 3

THE DATA STORY

CHRISTIAN MERFELD

The problem was maddening in its simplicity: How many people actually visit Boston's waterfront? It seemed like a question someone—anyone—should have answered long ago. But no one had. Not precisely. Not comprehensively. To Christian Merfeld, it felt like chasing shadows. Like trying to count grains of sand during an onshore wind. Ticket stubs, headcounts, guest books—all of it fragmented and brittle. The kind of data that looked official on a spreadsheet but unraveled the moment you asked a second question. And it wasn't just about numbers. It was about people. Who came. Who didn't. And why. It haunted him.

Each morning, just before sunrise, Christian ran the trails along the Neponset River with the quiet rhythm of footsteps on gravel echoing the questions spinning in his mind. The river knew fog, knew history, knew what it meant to be overlooked. It was a place where he, the son of a Cambodian refugee and a single mother in Allston, came to sort the signal from the static.

On one such morning, the fog hung thick. His husband's pace was steady beside him, their breaths visible in the cool air. Christian's earbuds crackled to life with the voice of a man he didn't know yet—but would come to revere. "Mobility data gives us the pulse of movement—without ever needing to ask a single person where they've been," said **Nishant Kishore Ph.D.**[22] Christian stopped running. Just stood there, chest rising, heart racing for a different reason now.

This was it. The missing cipher. What followed was a hunt. Not for secrets in code, but for patterns in motion—millions of them, streaming invisibly through Boston every day. Christian knew this world; before Boston Harbor Now, he had worked for a location technology startup. But that was for foot traffic in shops, not the civic soul of a city. Still, he knew the tools. And now, he had a mission.

He proposed a bold experiment: what if the same mobility data that tracked disease outbreaks and consumer habits could be wielded to crack the mystery of who used Boston's waterfront—and who didn't? The funders called it a moonshot. He called it overdue. He partnered with Tectonix, a company whose platform had been used by **The New York Times**[23] to show how spring break in Miami turned into a national superspreader event. Their computational engine could process billions of pings from cell phones.

It was the telescope he needed to see the unseen. Veraset, the data supplier, delivered the raw material: 140 billion anonymized records spanning four years, covering pre- and post-pandemic patterns. It was the modern-day equivalent of radar in wartime—tracking the movement of millions without revealing a single identity. But data needed framing. Context. Ground-truth. So Christian enrolled in an MIT executive course under **Professor Sinan Aral**[24] to sharpen the ethical and analytical edge of the work. He assembled a team of advisors, data scientists, and a steering committee of public and private waterfront stakeholders. Still, it wasn't enough to see the patterns from above. The project needed boots on the ground. So Boston

> "We could see them," ***Christian*** *said.* "Really see them. The ones who came. The ones who didn't. The ones we needed to invite. And the ones who haven't returned."
>
> CHRISTIAN MERFELD

Harbor Now brought in the MassINC Polling Group and used methods from Jan Gehl's **"How to Study Public Life"**[25] as the holy text of public space observation. Five waterfront parks. A team of surveyors. Clipboards, clickers, questions. Over 1,550 in-person surveys between 11 a.m. and 7 p.m., capturing people from lunch breaks to late commutes. The tension was constant. Variables refused to line up.

The datasets spoke different languages. Children didn't carry phones. Some communities were statistically invisible. Correlations emerged… then dissolved. He brought in an analyst from Brandeis to test the strength of the connection between the skies (the data) and the ground (the people). It wasn't perfect. It never would be. But it was more than they'd ever had.

For the first time, they could map who visited Boston's waterfront—where they came from, how far they traveled, and which communities were missing. The data whispered hard truths: that decades of public investment hadn't reached everyone. That despite its beauty, the harbor remained distant for many.

But the work also revealed something else—opportunity. "We could see them," Christian said. "Really see them. The ones who came. The ones who didn't. The ones we needed to invite. And the ones who haven't returned." In the quiet, often unseen corridors of Boston's public institutions, Christian had pulled the thread that tied a foggy morning by the river to a map of equity and access that could change how a city understood its own public shoreline. The project wasn't finished. But the code had been cracked. And in the story of Boston's waterfront, a new chapter had begun.

Chapter 4

LOOKING FORWARD

Today, some 40 years after Kathy Abbott worked as a manager on Gallops Island, some people are still surprised to hear that Boston has a harbor. Or they didn't know that the harbor is open to visitors. Even now, the question lingers: On a recent Roxbury community cruise organized in partnership with The American City Coalition, a passenger asked, "We have islands?" Abbott explained, "You do. This is your city. This is your harbor." It's a conversation that has to continue and reach many more people and communities. "As advocates, we think of the waterfront as a seriously underutilized asset that could benefit many more people," Abbott says, explaining the waterfront's untapped potential.

"The harbor is Boston's largest blue and green public open space. It has 47 miles of coastline, 43 of which have the Harborwalk. There are 50 square miles of water and acres and acres of public parks. It's a largely public space and the Harbor Islands are public, but we as a city and a region and a Commonwealth haven't focused enough on how important this space is as a public health, environmental, and economic resource."

"We've made progress in East Boston because we've been working there longer, and because the community is a waterfront community. But in Chinatown, which is only a quarter mile away from the waterfront, nobody is wandering to the Seaport District to enjoy the water". This sounds like a disappointing assessment after so many decades of effort to clean, rebuild, and revitalize the waterfront. But at the center of what hasn't happened yet is the bristling potential of what could happen.

"We have to think about what we want the future of our city and our region to look like," Abbott adds. Data holds some answers about the future. **A 2023 WBUR article notes**[26], "While Boston is only majority-minority by a slim margin, you see a different picture when you look at just children. The city reports white children make up just over a quarter of the 17-and-under population. Children that identify as Black or Hispanic make up about two-thirds."

This makes it essential to find ways to welcome more kids like Demani, the high school student who lives in Charlestown, so they can join in his use of and love for the waterfront. Existing partnerships and projects could grow and spark new ways to connect people to the waterfront. Boston Harbor Now is working to address these challenges through a new strategic plan that focuses on creating a more equitable future for Boston Harbor. Using the insights from the Waterfront Visitation and Equity Study as a starting point, has led to finding meaningful ways to close the gap in access to Boston Harbor's public open spaces.

But closing the gap will also take more than programs and partnerships — it requires systemic change. Stronger transit connections, investment in climate-ready infrastructure, and policies that prioritize equity are critical to ensuring that all Bostonians can share fully in the benefits of the waterfront. The insights from this study are meant to guide that shift, showing how government, civic partners, and communities together can create a harbor that is both accessible and resilient for everyone

This means reducing barriers and creating programs, events, and outreach that better connect with communities that are underrepresented. Boston Harbor Now is also committed to transparency and collaboration, sharing open-sourced data from the Waterfront Data Project on GitHub so individuals and organizations can explore, learn, and take action to help bridge the equity gap.

Boston's residents and organizations can build stronger connections—both real and symbolic—between the city's neighborhoods and its waterfront. The need and the mission are one: "We want the Harbor to become the heart of the city," Abbott says, "and we want everyone to benefit and have a sense of ownership."

This report has shed light on the untapped potential of Boston's waterfront and the need to create a more inclusive, welcoming space for all. The work of radical hospitality does not end here. Boston Harbor Now invites you, (the reader) to consider how you might lend your own energy and unique perspective to furthering this important mission. Whether through advocacy, community engagement, legislation, or other innovative solutions and investments, there is room for everyone to play a role in shaping a waterfront that truly reflects the diversity and vibrancy of the city and delivers on the promise of a Boston Harbor for All.

Appendix

ACKNOWLEDGEMENTS

This report was co-written by Alyssa Haywoode, who somehow wrangled hundreds of data points and just as many opinions into a single, readable document. Ralph Moreau made it beautiful, and legible, which is no small feat given our fondness for long captions and lovingly detailed charts.

We're especially grateful to the voices that brought to life this report with their insights and personal experiences: Kathy Abbott, Keeta and Sophia Robinson, Nikki and Demani Semnack, Veronica Robles, Olawumi Akinwumi, Bud Ris, and John Connors. Thank you for sharing your stories, your candor, and your vision for a harbor that truly belongs to everyone.

Luc Schuster of the Boston Indicators Project helped keep our spirits up and inspired us to tackle the big problems. Ford Fishman, our data whisperer, made sense of the digital footprints without losing the human behind the numbers. And Nishant Kishore Ph.D, our academic compass, kept us honest, curious, and ever questioning. Elliott Bradshaw and Mike Dimarco at Tectonix for their groundbreaking technology and willingness to take on this leap of faith. MassINC for sweating it out in the parks the whole month of August to give us a comparable dataset.

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And finally, to everyone who shared a Zoom call, a dataset, a memory, or a park conference panel with us, thank you. This report is better because of your contributions. And frankly, so are we.

GLOSSARY

Census Block Exclusions: For more narrow queries, Tectonix has also implemented some "Home Census Block" location exclusions. This tactic simply removes devices designated as native to specific census block groups in order to isolate visitation to specific areas.

Global Polygon: This method takes a single polygon derived purely from an upper and lower bound of the "Waterfront" region and extends analysis coverage .5 miles inland from the coastline. This polygon (which also includes the Harbor Islands) is ideal for large demographic queries and regional trend analysis.

Hashed ID's: This calculation reduces each device record count to a single record for the entirety of the specified cohort (i.e., all filters active against the data set to narrow the panel of data) and then multiplies that count by the projected data coverage multiple to represent actual population. Hashed ID's are a great tool to accurately approximate aggregate measures such as overall demographic breakdowns.

Hashed Visit Calculations : To better approximate actual population trends, Tectonix has created two key calculations that are frequently used in this analysis: "Hashed ID's" and "Hashed Visit ID's".

Hashed Visit ID's : This calculation reduces each device record count to a single record per "session" during the specified cohort (i.e., all filters active against the data set to narrow the panel of data) and then multiplies that count by the projected data coverage multiple to represent actual population. These "sessions" are typically small windows of time that represent individual "visits" to a location. Hashed Visit ID's are a great tool for accurately approximating how many times an individual action takes place (i.e., a person engages with a specific area or feature).

Home location: Each visit and visitor has associated values for home location, including home state and city. Visits/visitors with a home city of Boston also have a home neighborhood.

Individual Polygons: This approach, typically used for event-based queries or narrow location specific queries, utilizes small collections of polygons or individual polygons to provide precise results.

Local Exclusions: For many queries, it is beneficial to isolate non-residents and/or non-employees of the specified polygon boundaries being analyzed. To do so, Tectonix created "Local Exclusions" wherein two non-consecutive working weeks were selected for each year, and all devices that were present during a minimum of 3 days in each week (during working hours) were removed from the data set. While this calculation cannot guarantee 100% removal of "locals," it does greatly increase likelihood that analyzed populations are visitors to public spaces.

Normalization: A way of making sure data collected from different places "speaks the same language." When information comes in many shapes, different formats, scales, or labels, normalization brings it into a common frame so it can be compared and combined fairly. This helps ensure that what we see in the numbers reflects real patterns of behavior, not quirks of mismatched data.

Polygon: Geospatial object representing an area or location, such as a park or an island. The polygons are organized into 4 overlapping polygon sets: the Broad Waterfront, the Narrow Harborwalk, the Waterfront Parks, and the Boston Harbor Islands. The Harborwalk is a 10-12' wide boardwalk along that waterfront that is a subset of the Broad Waterfront, and the Waterfront Parks are important public spaces along the Harborwalk.

Polygon Portfolio : This method aggregates dozens of individual polygons to create a comprehensive collection of all areas of interest to the BHN team. This method better voids data obstructions such as roadways, however greatly reduces overall data collect, therefore is best suited for more detailed queries.

Polygon Selection: Polygons for this analysis set were set up in three distinct strategic methods.

Record: A ping from a cell phone application along with its associated data, such as census block information.

Visit: A calculated value from records representing unique appearances of unique individuals appearing in a specific polygon in a given time frame. Visits are much more stable than visitors over long periods of time.

Visitor: A calculated value from records representing the number of unique individuals appearing in a specified polygon in a given time frame. Visitor values have some instability, as people acquire new devices over time.

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ADDITIONAL RESOURCES

Additional materials are available on **Boston Harbor Now**'s website to support and provide transparency, reproducibility, and continued collaboration. To access these additional resources and learn more about the project visit www.bostonharbornow.org/waterfrontdataproject

Data and Code Availability

The full Python code used in this project's analysis is available on our GitHub repository. All datasets, as well as the figures referenced throughout the report, can be accessed via Google Drive.

Other Reports

For readers interested in supplemental studies and analyses, we recommend the following resources:

- **MassINC's "A Walk in the Parks"**, September 2023 – A data-rich report from our substudy for validation featuring foot traffic trends, occupancy counts, and survey insights from Boston's waterfront parks.
- **Interrater Reliability Analyses by Ford Fishman 2024** – Two reports evaluating consistency between MassINC and Veraset data sources.
- **Query Summaries by Ford Fishman 2024** – A breakdown of the analytical queries used to generate insights across the datasets.

These additional materials may offer broader context and technical detail for those seeking to better understand visitation dynamics and data methodology along Boston's evolving public waterfront.

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